Chaptalia hermogenis (Asteraceae: Mutisieae), a New Species from the Brazilian Atlantic Rain Forest

Marta Dias de Moraes
Departamento de Botânica, I.B., UNICAMP, Caixa Postal 6109,
Campinas 13083-970, SP, Brazil

ABSTRACT. *Chaptalia hermogenis* (sect. *Archichaptalia)*, currently known only from a montane forest in the Atlantic Rain Forest region of southeastern Brazil, is described and illustrated. The new species is compared with the closely similar *C. cordifolia* (Baker) Cabrera. It is distinguished by a long involucre, the long expanded limb with an inner linear lip of the female florets, the absence of tubular-filiform internal female florets, a character rare in the genus, and a sparsely pubescent achene.

Chaptalia Ventenat comprises about 56 species distributed from the southern United States to southern South America (Nesom, 1995), with at least 12 species occurring in Brazil. Some Brazilian species have a wide distribution, while a few seem to be endemic to smaller areas, such as *C. denticulata* (Baker) Zardini in the Atlantic Rain Forest of the state of Rio de Janeiro and *C. graminifolia* (Dusén) Cabrera in the states of Paraná and Santa Catarina. The most useful taxonomic treatment of this genus is still the monograph by Burkart (1944). His seven sections were considered by Nesom (1995) to be probably natural. A group of species that Burkart (1944) referred to *Trichocline* Cassini, although he found the species difficult to separate from *Chaptalia* sect. *Archichaptalia* Burkart, has since then been transferred to *Chaptalia. Trichocline cordifolia* Baker, transferred to *Chaptalia* by Cabrera (Cabrera & Klein, 1973), closely resembles the new species described here. *Trichocline*, distributed in South America, and *Gerbera* L., in Africa and Asia, are generally accepted as closely related to *Chaptalia*, but both differ from this genus by the presence of staminodes in the female florets, a difference accepted by Burkart (1944) but considered as not completely satisfactory. Hansen (1990) concluded from his phylogenetic studies in the *Gerbera*-complex (*Chaptalia, Trichocline, Gerbera,* and four small genera (*Leibnitzia* Cassini, *Lulia* Zardini, *Perdicium* L., and *Uechtritzia* Freyn)), that this complex should be ranked as a single, large genus, but considered it premature to propose any formal taxonomic changes. The cladogram presented by Hansen (1990) is based only on 15 characters and some of these are polymorphic in his terminal taxa. For example, the character "scape" was considered bracteate in the genus *Chaptalia*, but the scape in the new species is ebracteate as it is in several *Chaptalia* species (e.g., *C. integerrima* (Vellozo) Burkart, *C. nutans* (L.) Polák). *Chaptalia hermogenis* is included in section *Archichaptalia* based on its long-petiolate leaves and shortly decurrent, broadly ovate blades. The inclusion of the new species enlarges the circumscription of section *Archichaptalia*, because *C. hermogenis* has the corolla of the inner female florets longer than the style. The new species has an ebracteate scape, while *C. cordifolia* has a scape without or with few linear bracts. In the other species of this section the scape is described as bracteate with few to many bracts, and as in *C. cordifolia*, the corolla of the inner female florets is described as being shorter than the style.

Chaptalia hermogenis M. D. Moraes, sp. nov. TYPE: Brazil. São Paulo: Eldorado, Núcleo Caverna do Diabo, Parque Estadual de Jacupiranga, on nearest hill on the E side of the headquarters, 24°38′41″S, 48°23′31″W, ca. 600 m alt., 5 Sep. 1996. *M. D. Moraes & F. A. R. D. P. Arzolla 367* (holotype, UEC; isotypes, B, F, G, K, LP, M, MBM, MO, NY, R, RB, SP, UPS, W). Figure 1.

Chaptalia hermogenis C. cordifoliam (Baker) Cabrera simulat, sed differt scapo florifero semper ebracteato, ferrugineo-villoso praecipue ad apicem; capitulo multifloro; involucro 15.7–21 mm longo; floribus marginalibus 16–30 femininеis ligulato-bilabiatis exsertis, limbo 11.5–13.6 mm longo, 2–2.6 mm lato, 4–6-nervato, apice integro vel tridentato, lobulo interno 2-laciniato, 1.7–7.3 mm longo, rare integro; floribus femininеis internis 11–43 floribus marginalibus similibus sed centrum versus minoribus; flosculis femineis reductis nullis; floribus centralibus disci 24–61 masculis, corollis bilabiatis 9.2–10.5 mm longis, limbo 3-denticulato, lobulis reflexis apice papilloso; achеniis pubescentibus.

Perennial herb up to 20 cm high with a rosette

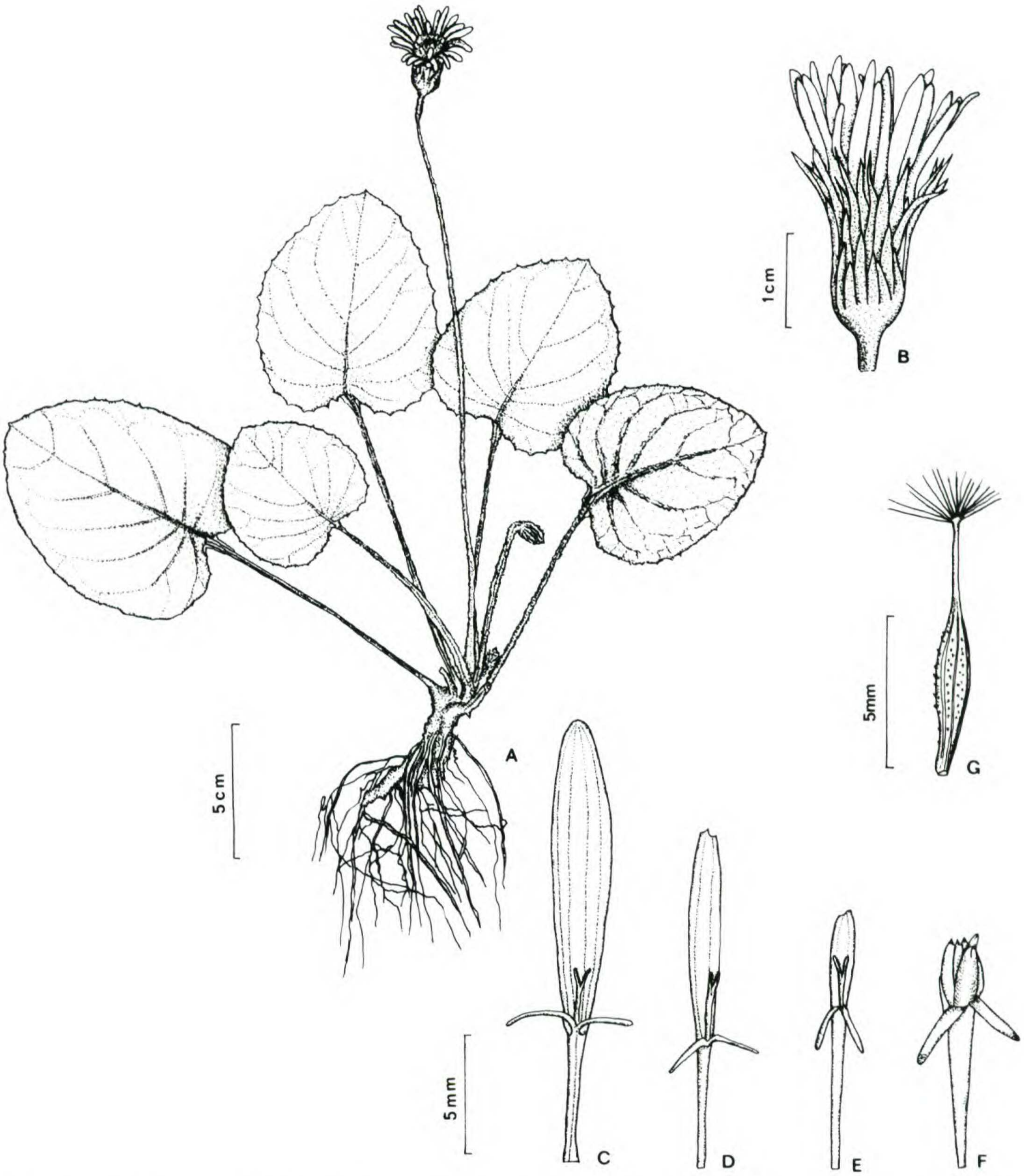

Figure 1. *Chaptalia hermogenis* M. D. Moraes.—A. Habit.—B. Capitulum showing the involucre.—C. Corolla of the outer female florets.—D, E. Corolla of the inner female florets decreasing in size toward the center.—F. Corolla of the central functionally male florets.—G. Achene with pappus base. Based on type specimen *M. D. Moraes & F. A. R. D. P. Arzolla 367* (UEC).

of basal leaves. Petiole 5.5–24 cm long, golden brown villous-tomentose; blade (3–)5–9(–12) × (3.5–)5–9(–11) cm, broadly to very broadly ovate, base cordate, shortly decurrent, apex obtuse or rounded, with minute apiculus, margin sparsely minutely denticulate; blade with 4–7 veins per side, anastomosing, impressed above, prominent below, upper surface initially sparsely villous, becoming glabrous with remains of the indumentum on the basal portion of the midvein, lower surface densely pale golden brown villous-tomentose. Scape (12–) 16–35(–42) cm long, 1.3–2.2 mm diam., ebracteate, golden brown villous, particularly at the apex; head nodding in bud, erect at anthesis; involucre 15.7–21 mm long, campanulate; involucral bracts in 3–4 rows, densely golden brown villous. Florets